

Claims

1. A portable printer comprising:
a housing having a compartment for a roll of media having a core with a diameter;
a roll positioning means; and
two spindle members coupled to said roll positioning means in the compartment, in
which each of the spindle members has two sides with different diameter conical surfaces and
are reversibly mountable to said roll positioning means to select the side of each of said spindle
members having said conical surfaces of the diameter for engaging the diameter of the core of
the roll mountable between the spindle members.
2. The portable printer according to Claim 1 wherein roll positioning means
comprises two guide members coupled to each other for movement in opposite directions with
respect to a position between said guide members, in which each of said two spindle members
are rotatably mounted upon a different one of said guide members for engaging ends of a core of
the roll when loaded in the compartment,
3. The portable printer according to Claim 1 wherein each of said spindle members
has a shaft with an opening extending through said sides of the spindle member centrally disposed
with respect to the conical surfaces of the spindle members, and each of said edge guide
members has a shaft for removably mounting via said opening of one of said spindle members.
4. The portable printer according to Claim 1 wherein said roll positioning means
urges the conical surface of said selected side of each of the spindle members into ends of the
core of the roll.
5. The portable printer according to Claim 1 wherein when the core of said roll is
crushed or of a non-circular cross-sectional shape, the conical surface of the selected sides of
each of the spindle members when located in the core of the roll reshapes the interior diameter of
the ends of the core of the roll to a substantially circular cross-sectional shape.

6. The portable printer according to Claim 1 wherein said roll positioning means urges the conical surface of said selected sides of each of the spindle members into the ends of the core of the roll to locate the conical surface in the core.

7. The portable printer according to Claim 1 wherein said sides of each spindle member represents a first side and a second side, said conical surface of said first side is capable of engaging different ones of the roll having a first diameter core, and said second side has a conical surface capable of engaging different ones of the roll of a second diameter core.

8. The portable printer according to Claim 1 wherein roll positioning means comprises a pair of racks and one or more gears, each said racks being coupled to one of said guide members and to each other by said gears to enable each of said guide members to move in opposite directions with respect to a position between the guide members, and each of said guide members has means for removably mounting one of said spindle members.

9. The portable printer according to Claim 1 wherein said spindle members represent two of a plurality of different spindle members each having different sides of different diameter conical surfaces for adapting the printer for using rolls having more than two different core diameters.

10. The portable printer according to Claim 1 wherein the conical surfaces of each of said spindle members is truncated.

11. A spindle member for use in mechanism for positioning a roll of media for printing on media from such roll comprising:

a body having with two sides, in which each of said sides having a surface for engaging different diameter core sizes; and

an opening extending through said body centrally with respect to the surface of each of said sides.

12. The spindle member according to Claim 11 wherein said spindle member is attachable via said opening in the printer to select one of a first of said sides to engage a core of a roll in a printer, or a second of said sides to engage a core of a different diameter core than said first of said sides.

13. The spindle member according to Claim 11 wherein said core of the roll has two ends, and said surface of each of said sides is conical to enable the spindle member when inserted in one of said ends of said core to reshape said one of said ends when said one of said ends is oval.

14. A portable printer for printing on media from a roll of media having a core comprising:

a housing;

two guide members in said housing; and

two spindle members each rotatably mounted upon a different one of said guide members for engaging ends of a core of the roll when loaded in the compartment, each of said spindle member having a surface for engaging different diameter core sizes, and a hub for enabling attachment and detachment to a guide member in the printer to select a first of said sides to face and engage a core of a roll in a printer, or selecting a second of said sides to face and engage a core of a different diameter core than said first side.

15. The portable printer according to Claim 14 wherein said guide members are spring biased towards each other to urge said spindle members toward each other into the ends of the core of the roll, each of said spindle members has a surface when urged into the ends of the core of the roll that shapes the interior diameter of the ends of the core of a roll to a substantially circularly cross-sectional shape when said roll is crushed.

16. The portable printer according to Claim 14 wherein said surface of each of said spindle member is of a conical shape.

17. A portable printer for printing on media from a roll of media having a core comprising:

a housing with a compartment for a roll of media;

means in said housing comprising two guide members coupled to each other for movement in opposite directions with respect to a position between said guide members;

two spindle members are rotatably mounted upon a different one of said guide members for engaging ends of a core of the roll when loaded in the compartment; and

each spindle member comprises a disk with two sides, each of said sides having one of a conical or cylindrical protruding portion of a different diameter, and said disk having a hub enabling attachment and detachment from its respective guide member to select one of said sides having a protruding portion of a diameter to face and engage the core of the roll when loaded in the compartment.

18. A method in a printer for rotationally mounting a roll of media having a core comprising the steps of:

providing two roll supporting members rotationally mountable in the printer, in which each of said members has two sides, each side has features for engaging rolls of different diameter cores than the other side of said member; and

rotationally mounting each member in the printer in which the side of each member facing said roll has the features for engaging the interior diameter of the core of the roll.

19. The method according to Claim 18 wherein said features along each side of said member represents one of conical or cylindrical protruding surfaces.

20. The method according to Claim 18 further comprising the steps of:

urging the members of each of the guide members toward each other into the ends of the core of the roll; and

providing upon each member a surface which when urged into the ends of the core of the roll shapes the interior diameter of the ends of the core of a roll to a substantially circularly cross-sectional shape when the ends of the roll are oval.

21. A portable printer comprising:
a housing having a compartment for a roll of media having a core with two ends;
a roll positioning means; and
two spindle members coupled to said roll positioning means in which said spindle
members are spring biased towards each other and each of said spindle members has a projection
with a conical surface urged into a different one of the two ends of said roll when loaded in the
compartment.

22. The printer according to Claim 21 wherein said conical surface of each of said
spindle members enables the spindle member when inserted in one of said ends of said core to
reshape said one of said ends when said one of said ends is oval.